OIPE

RAW SEQUENCE LISTING

DATE: 12/06/2001

PATENT APPLICATION: US/09/996,569

TIME: 15:04:44

Input Set : A:\PF201D2-SeqList-text.txt Output Set: N:\CRF3\12062001\I996569.raw

ENTERED

```
3 <110> APPLICANT: Soppet et al.
      5 <120> TITLE OF INVENTION: G-Protein Parathyroid Hormone Receptor HLTDG74
      7 <130> FILE REFERENCE: PF201D1
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/996,569
C--> 10 <141> CURRENT FILING DATE: 2001-11-30
     12 <150> PRIOR APPLICATION NUMBER: 08/468,011
     13 <151> PRIOR FILING DATE: 1995-06-06
     15 <160> NUMBER OF SEQ ID NOS: 28
     17 <170> SOFTWARE: PatentIn Ver. 2.1
     19 <210> SEQ ID NO: 1
     20 <211> LENGTH: 2003
     21 <212> TYPE: DNA
     22 <213> ORGANISM: Homo sapiens
     24 <220> FEATURE:
     25 <221> NAME/KEY: CDS
     26 <222> LOCATION: (90)..(1715)
     28 <400> SEQUENCE: 1
     29 gtttgctctg ggcagccaag ttggcatatt ggaagctttt tccgggctct ggaggagggt 60
     31 coetgettet teetacagee gtteeggge atg gee tgg etg ggg geg teg etc
     32
                                         Met Ala Trp Leu Gly Ala Ser Leu
     33
     35 cac gtc tgg ggt tgg cta atg ctc ggc agc tgc ctc ctg gcc aga gcc
                                                                           161
     36 His Val Trp Gly Trp Leu Met Leu Gly Ser Cys Leu Leu Ala Arg Ala
     37
             10
                                 15
                                                                           209
     39 cag ctg gat tot gat ggc acc atc act ata gag gag cag att gtc ott
     40 Gln Leu Asp Ser Asp Gly Thr Ile Thr Ile Glu Glu Gln Ile Val Leu
                             30
                                                                           257
     43 gtg ctg aaa gcg aaa gta caa tgt gaa ctc aac atc aca gct caa ctc
     44 Val Leu Lys Ala Lys Val Gln Cys Glu Leu Asn Ile Thr Ala Gln Leu
                         45
     47 cag gag gga gaa ggt aat tgt ttc cct gaa tgg gat gga ctc att tgt
                                                                           305
     48 Gln Glu Gly Glu Gly Asn Cys Phe Pro Glu Trp Asp Gly Leu Ile Cys
                     60
                                          65
     51 tgg ccc aga gga aca gtg ggg aaa ata tcg gct gtt cca tgc cct cct
                                                                           353
     52 Trp Pro Arg Gly Thr Val Gly Lys Ile Ser Ala Val Pro Cys Pro Pro
                 75
                                      80
                                                                           401
     55 tat att tat gac ttc aac cat aaa gga gtt gct ttc cga cac tgt aac
     56 Tyr Ile Tyr Asp Phe Asn His Lys Gly Val Ala Phe Arg His Cys Asn
     57
             90
                                  95
     59 ccc aat gga aca tgg gat ttt atg cac agc tta aat aaa aca tgg gcc
                                                                           449
     60 Pro Asn Gly Thr Trp Asp Phe Met His Ser Leu Asn Lys Thr Trp Ala
     63 aat tat toa gac tgc ctt cgc ttt ctg cag cca gat atc agc ata gga
                                                                           497
     64 Asn Tyr Ser Asp Cys Leu Arg Phe Leu Gln Pro Asp Ile Ser Ile Gly
                        125
                                             130
     67 aag caa gaa ttc tgt gaa cgc ctc tat gta atg tat acc gtt ggc tac
                                                                           545
     68 Lys Gln Glu Phe Cys Glu Arg Leu Tyr Val Met Tyr Thr Val Gly Tyr
```

RAW SEQUENCE LISTING DATE: 12/06/2001 PATENT APPLICATION: US/09/996,569 TIME: 15:04:44

Input Set : A:\PF201D2-SeqList-text.txt
Output Set: N:\CRF3\12062001\1996569.raw

69				140					1 4 5								
	+ 00	2+0	+ a+		~~+	+			145					150			5 00
71	Com	atc	Com	Dha	991	LCC	LLG	get	grg	gct	att	CTC	atc	att	ggt	tac	593
73	ser	Ile	155	Pne	GTÀ	ser	Leu		vaı	Ата	TTE	Leu		тте	Gly	Tyr	
	++0	242		++~	aa+	+ ~ ~		160					165				~ . ~
76	Dho	aga	7 mar	Tou	Uat	Lyc	act	agg	aac	tat	atc	cac	atg	cac	tta -	ttt	641
70 77	Pile	Arg 170	Arg	ьеи	HIS	Cys		Arg	Asn	Tyr	тте		Met	Hls	Leu	Phe	
	a+ a		++0	2 t ~	a+ ~		175					180					
90	y Ly	tct	Dho	Mot	CLG	aga	gct	aca	agc	atc	דננ	gtc	aaa	gac	aga	gta	689
	185	Ser	Pne	мес			Ата	Thr	ser	тте		Val	Lys	Asp	Arg		
		ast.	a a t	~~~		190					195					200	
0.0	y	cat	310	Cac	ala	gga	gta	aag	gag	ctg	gag	tcc	cta	ata	atg	cag	737
	Val	His	Ата	HIS		СТА	vaı	гàг	GIU		Glu	Ser	Leu	He		GIn	
85 97	~~+	~~~			205					210					215		
0/	yaı	gac	Dro	Cda	aal	CCC	att	gag	gca	act	tct	gtg	gac	aaa -	tca	caa	785
89	ASP	Asp	PIO		ASn	ser	тте	GIu		Thr	Ser	Val	Asp	_	Ser	Gln	
				220					225					230			
91	Lat	atc	999	tgc	aag	att	gct	gtt	gtg	atg	ttt	att	tac	ttc	ctg	gct	833
	TYL	Ile		суѕ	Lys	тте	Ala		Val	Met	Phe	Ile		Phe	Leu	Ala	
93			235					240					245				
95	dCd mb-	aat	Tat	Tat	rgg	atc	ctg	gtg	gaa	ggt	ctc	tac	ctg	cat	aat	ctc	881
	THE	Asn	TYL	туг	Trp	тте		vaı	GLu	GLY	Leu		Leu	His	Asn	Leu	
97	2+0	250	~+~	~ a+	++~		255					260					
33 100	alc	ttt	9 L 9 17 - 1	yct via	LLC	LLL	ccg	gac	acc	aaa	tac	ctg	tgg	ggc	ttc	atc	929
100	265	Pile	val	. Ald	PHE			ASP	Thr	гуs			Trp	GLy	Phe	lle	
			~~~	. +~~		270					275					280	
103	LLY	Tla	990 C15	: Lyy	999	Dho	Dro	g ca	. gca	בננ	gtt	gca	gca	tgg	gct	gtg	977
105		ııre	GIY	115	285		PIO	Ald	Ата			Ата	Ala	Trp		Val	
		ou a	αα=	a a t			~ a +	~~~		290			_ 4. 4.		295		1005
109	y Cu مالة	Ara	γCu	mh _r	tou	315	yaı	315	ayy	Lyc	Lgg	gaa	CLL	agt	gct	gga	1025
100	AIU	. Alg	Ата	300		Ата	ASP	нта	305	Cys	ттр	GIU	ьeu			Gly	
		ato	220			+ - +								310			1070
112	Δen	Tla	- uay	Lyy	all	Lal			000	~ + ~	++-	~					
113	Top		1.37.0	Trn	T10	Trr	Cln	gca	ccg	atc	tta	gca	gct	att	ggg	ctg	1073
				Trp	Ile	Tyr	Gln	Ala	ccg Pro	atc Ile	tta Leu	gca Ala	Ala	att Ile	ggg Gly	ctg Leu	10/3
115			315	Trp	Ile	Tyr	Gln	Ala 320	Pro	Ile	Leu	Ala	Ala 325	Ile	Gly	Leu	,
115 116	aat	ttt	315 att	Trp ctg	Ile	Tyr ctg	Gln aat	Ala 320 acg	Pro gtt	Ile aga	Leu gtt	Ala cta	Ala 325 gct	Ile	Gly aaa	Leu	1121
116	aat Asn	ttt Phe	315 att	Trp ctg	Ile	Tyr ctg	Gln aat Asn	Ala 320 acg	Pro gtt	Ile aga	Leu gtt	Ala cta Leu	Ala 325 gct	Ile	Gly aaa	Leu	,
116 117	aat Asn	ttt Phe 330	315 att Ile	Trp ctg Leu	Ile ttt Phe	Tyr ctg Leu	Gln aat Asn 335	Ala 320 acg Thr	Pro gtt Val	Ile aga Arg	Leu gtt Val	Ala cta Leu 340	Ala 325 gct Ala	Ile acc Thr	Gly aaa Lys	Leu atc Ile	1121
116 117 119	aat Asn tgg	ttt Phe 330 gag	315 att Ile	trp ctg Leu aat	Ile ttt Phe gca	Tyr ctg Leu gtt	Gln aat Asn 335 ggg	Ala 320 acg Thr	gtt Val gac	Ile aga Arg aca	Leu gtt Val	Ala cta Leu 340 aag	Ala 325 gct Ala caa	Ile acc Thr	Gly aaa Lys	Leu atc Ile	,
116 117 119 120	aat Asn tgg Trp	ttt Phe 330 gag Glu	315 att Ile	ctg Leu aat	ttt Phe gca Ala	Tyr ctg Leu gtt Val	Gln aat Asn 335 ggg Gly	Ala 320 acg Thr	gtt Val gac Asp	aga Arg aca Thr	gtt Val agg Arg	cta Leu 340 aag Lys	Ala 325 gct Ala caa	Ile acc Thr	Gly aaa Lys	atc Ile aaa Lys	1121
116 117 119 120 121	aat Asn tgg Trp 345	ttt Phe 330 gag Glu	315 att Ile acc Thr	ctg Leu aat Asn	ttt Phe gca Ala	Tyr ctg Leu gtt Val 350	Gln aat Asn 335 ggg Gly	Ala 320 acg Thr cat	gtt Val gac Asp	aga Arg aca Thr	gtt Val agg Arg 355	cta Leu 340 aag Lys	Ala 325 gct Ala caa Gln	acc Thr tac	Gly aaa Lys agg Arg	Leu atc Ile aaa Lys 360	1121 1169
116 117 119 120 121 123	aat Asn tgg Trp 345 ctg	ttt Phe 330 gag Glu gcc	315 att Ile acc Thr	ctg Leu aat Asn	Ile ttt Phe gca Ala aca	tyr ctg Leu gtt Val 350 ctg	Gln aat Asn 335 ggg Gly gtc	Ala 320 acg Thr cat His	gtt Val gac Asp	Ile aga Arg aca Thr	gtt Val agg Arg 355 gtc	cta Leu 340 aag Lys	Ala 325 gct Ala caa Gln	Ile acc Thr tac Tyr	Gly aaa Lys agg Arg	teu atc Ile aaa Lys 360 tac	1121
116 117 119 120 121 123 124	aat Asn tgg Trp 345 ctg	ttt Phe 330 gag Glu	315 att Ile acc Thr	ctg Leu aat Asn	Ile ttt Phe gca Ala aca Thr	tyr ctg Leu gtt Val 350 ctg	Gln aat Asn 335 ggg Gly gtc	Ala 320 acg Thr cat His	gtt Val gac Asp	aga Arg aca Thr	gtt Val agg Arg 355 gtc	cta Leu 340 aag Lys	Ala 325 gct Ala caa Gln	Ile acc Thr tac Tyr	aaaa Lys agg Arg	teu atc Ile aaa Lys 360 tac Tyr	1121 1169
116 117 119 120 121 123 124 125	aat Asn tgg Trp 345 ctg Leu	ttt Phe 330 gag Glu gcc Ala	att Ile acc Thr aaa Lys	ctg Leu aat Asn tcg Ser	ttt Phe gca Ala aca Thr 365	ctg Leu gtt Val 350 ctg Leu	aat Asn 335 ggg Gly gtc Val	Ala 320 acg Thr cat His ctg Leu	gtt Val gac Asp gtc Val	aga Arg aca Thr cta Leu 370	gtt Val agg Arg 355 gtc Val	cta Leu 340 aag Lys ttt Phe	Ala 325 gct Ala caa Gln gga Gly	Ile acc Thr tac Tyr gtg Val	aaaa Lysaagg Arg	atc atc alle aaa Lys 360 tac Tyr	1121 1169 1217
116 117 119 120 121 123 124 125 127	aat Asn tgg Trp 345 ctg Leu	Phe 330 gag Glu gcc Ala	att Ile acc Thr aaa Lys	ctg Leu aat Asn tcg Ser	ttt Phe gca Ala aca Thr 365	tyr ctg Leu gtt Val 350 ctg Leu	Gln aat Asn 335 ggg Gly gtc Val cct	Ala 320 acg Thr cat His ctg Leu	gtt Val gac Asp gtc Val	aga Arg aca Thr cta Leu 370	gtt Val agg Arg 355 gtc Val	cta Leu 340 aag Lys ttt Phe	Ala 325 gct Ala caa Gln gga Gly	Ile acc Thr tac Tyr gtg Val	aaa Lys agg Arg cat His 375	Leu atc atc Ile aaa Lys 360 tac Tyr	1121 1169
116 117 119 120 121 123 124 125 127	aat Asn tgg Trp 345 ctg Leu	ttt Phe 330 gag Glu gcc Ala	att Ile acc Thr aaa Lys	ctg Leu aat Asn tcg Ser gtg Val	ttt Phe gca Ala aca Thr 365	tyr ctg Leu gtt Val 350 ctg Leu	Gln aat Asn 335 ggg Gly gtc Val cct	Ala 320 acg Thr cat His ctg Leu	gtt Val gac Asp gtc Val tcc Ser	aga Arg aca Thr cta Leu 370	gtt Val agg Arg 355 gtc Val	cta Leu 340 aag Lys ttt Phe	Ala 325 gct Ala caa Gln gga Gly	acc Thr tac Tyr gtg val ggg Gly	aaa Lys agg Arg cat His 375	Leu atc atc Ile aaa Lys 360 tac Tyr	1121 1169 1217
116 117 119 120 121 123 124 125 127 128 129	aat Asn tgg Trp 345 ctg Leu atc	ttt Phe 330 gag Glu gcc Ala gtg Val	according aaaa Lys	ctg Leu aat Asn tcg Ser gtg Val 380	ttt Phe gca Ala aca Thr 365 tgc Cys	ctg Leu gtt Val 350 ctg Leu ctg	Gln aat Asn 335 ggg Gly gtc Val cct Pro	Ala 320 acg Thr cat His ctg Leu cac	gtt Val gac Asp gtc Val tcc Ser 385	aga Arg aca Thr cta Leu 370 ttc Phe	gtt Val agg Arg 355 gtc Val act	cta Leu 340 aag Lys ttt Phe	Ala 325 gct Ala caa Gln gga Gly ctc Leu	acc Thr tac Tyr gtg Val ggg Gly 390	aaaa Lys agg Arg cat His 375 tgg	atc atc Ile aaa Lys 360 tac Tyr gag Glu	1121 1169 1217 1265
116 117 119 120 121 123 124 125 127 128 129 131	aat Asn tgg Trp 345 ctg Leu atc	ttt Phe 330 gag Glu gcc Ala gtg Val	accornic aaaa Lys ttc Phe atg	ctg Leu aat Asn tcg Ser gtg Val 380 cac	ttt Phe gca Ala aca Thr 365 tgc Cys	tyr ctg Leu gtt Val 350 ctg Leu ctg Leu	Gln aat Asn 335 ggg Gly gtc Val cct Pro	Ala 320 acg Thr cat His ctg Leu cac His	gtt Val gac Asp gtc Val tcc Ser 385	aga Arg aca Thr cta Leu 370 ttc Phe	gtt Val agg Arg 355 gtc Val act Thr	cta Leu 340 aag Lys ttt Phe ggg Gly	Ala 325 gct Ala caa Gln gga Gly ctc Leu	acc Thr tac Tyr gtg Val ggg Gly 390 ggt	aaaa Lys agg Arg cat His 375 tgg Trp	Leu atc Ile aaa Lys 360 tac Tyr gag Glu	1121 1169 1217
116 117 119 120 121 123 124 125 127 128 129 131	aat Asn tgg Trp 345 ctg Leu atc	ttt Phe 330 gag Glu gcc Ala gtg Val	accornic aaaa Lys ttc Phe atg	ctg Leu aat Asn tcg Ser gtg Val 380 cac	ttt Phe gca Ala aca Thr 365 tgc Cys	tyr ctg Leu gtt Val 350 ctg Leu ctg Leu	Gln aat Asn 335 ggg Gly gtc Val cct Pro	Ala 320 acg Thr cat His ctg Leu cac His	gtt Val gac Asp gtc Val tcc Ser 385	aga Arg aca Thr cta Leu 370 ttc Phe	gtt Val agg Arg 355 gtc Val act Thr	cta Leu 340 aag Lys ttt Phe ggg Gly	Ala 325 gct Ala caa Gln gga Gly ctc Leu	acc Thr tac Tyr gtg Val ggg Gly 390 ggt	aaaa Lys agg Arg cat His 375 tgg Trp	Leu atc Ile aaa Lys 360 tac Tyr gag Glu	1121 1169 1217 1265

RAW SEQUENCE LISTING DATE: 12/06/2001 PATENT APPLICATION: US/09/996,569 TIME: 15:04:44

Input Set : A:\PF201D2-SeqList-text.txt
Output Set: N:\CRF3\12062001\1996569.raw

135 136																	
136	gtg																1361
	vaı		ire	ше	Tyr	Cys		Cys	Asn	GTÄ	GLU		GIN	Ата	GLu	Val	
137		410	5 ± 65	+~~	~~+	~~~	415	+	-+-			420					1400
	aag																1409
	Lys 425	гуу	Mec	ттр	ser	430	ттр	ASII	Leu	ser	435	ASP	пр	ьуѕ	Arg	440	
	ccg	003	tat	aaa	300		202	+ ~ ~	~~~	+ 02		ata	300	200	a+ a		1457
	Pro																1437
145	110	110	Cys	OLY	445	nrg	ALG	СУЗ	GIY	450	Val	пец	1111	1111	455	1111	
	cac	aσc	acc	aαc		caσ	tica	caq	ata		σса	gga	cac	gca		tac	1505
	His																1505
149				460					465					470		012	
	tta	tct	ctq	qca	aaq	ctq	cca	aga	tcq	cca	qca	gac	agc	cta	aca	qcc	1553
	Leu																
153			475		-			480				-	485				
155	aca	tca	ctt	tac	ctg	gct	atg	tct	gga	gta	act	cag	agc	agg	act	gcc	1601
156	Thr	Ser	Leu	Tyr	Leu	Ala	Met	Ser	Gly	Val	Thr	Gln	Ser	Arg	Thr	Ala	
157		490					495					500					
159	tca	cac	act	ctc	tcc	acg	agg	agc	aac	aag	gaa	gat	agt	ggg	agg	cag	1649
160	Ser	His	Thr	Leu	Ser	Thr	Arg	Ser	Asn	Lys	Glu	Asp	Ser	Gly	Arg	Gln	
161	505					510					515					520	
	aga	-	-			_		_					_	_			1697
	Arg	Asp	Asp	Ile		Met	Glu	Lys	Pro		Arg	Pro	Met	Glu		Asn	
165					525					530					535		
	cca					tgad	caago	gag a	aact	gagg	ja to	gttct	ctga	ı atç	ggaca	itgt	1752
	Pro	Asp	Thr		GLY												
169	~+ ~ ·	+		540		- <b>-</b>											1010
	a i.a c			LCai												gatact	TRIZ
					cctatgcttg agcacaaagg ctgaaaattc agttaaggtg ttacttaata atagttttta ggctccatga attggctcct gtaaatacta acgacatgaa aatgcaagtg tcaatggagt												
173	ccta	atgct	tg a	agcad													1872
173 175	ccta ggct	tgct ccat	itg a	agcad attg	gctc	ct gt	aaat	acta	ace	gacat	gaa	aato	gcaaq	gtg 1	caat	ggagt	1872 1932
173 175 177	ccta ggct agtt	tgct ccat tatt	itg a iga a iac d	agcad attgg cttc1	gctc	ct gt	aaat	acta	ace	gacat	gaa	aato	gcaaq	gtg 1	caat		1872 1932 1992
173 175 177 179	ccta ggct agtt gtga	atget ceat ctatt attgt	itg a iga a iac d itc a	agcad attgo cttci	getee	ct gt	aaat	acta	ace	gacat	gaa	aato	gcaaq	gtg 1	caat	ggagt	1872 1932
173 175 177 179 184	ggct agtt gtga <210	atgct ccat ctatt attgt )> SI	itg a iga a iac o itc a EQ II	agcad attgo ettei a NO:	gete tatte : 2	ct gt	aaat	acta	ace	gacat	gaa	aato	gcaaq	gtg 1	caat	ggagt	1872 1932 1992
173 175 177 179 184 185	ggct agtt gtga <210 <211	atget ceat ctatt attgt )> SI L> LI	tga a tac o ttc a EQ II	agcad attgo etter a D NO:	gete tatte : 2	ct gt	aaat	acta	ace	gacat	gaa	aato	gcaaq	gtg 1	caat	ggagt	1872 1932 1992
173 175 177 179 184 185 186	ccta ggct agtt gtga <210 <211	atget ceat tatt attgt )> SI L> LI 2> TY	tga a tac o tc a EQ II ENGTH	agcad attgo ettet a D NO: H: 54 PRT	getee tatte : 2 !1	ct gt gg ca	aaat itcaa	acta igttt	ace	gacat	gaa	aato	gcaaq	gtg 1	caat	ggagt	1872 1932 1992
173 175 177 179 184 185 186	ccta ggct agtt gtga <210 <211 <212	atget ceat tatt attgt )> SI L> LI 2> TY	etg a a sac of a control of the a contro	agcad attgo etter a NO: FRT ISM:	geteo tatto : 2 !1 Homo	ct gt gg ca	aaat itcaa	acta igttt	ace	gacat	gaa	aato	gcaaq	gtg 1	caat	ggagt	1872 1932 1992
173 175 177 179 184 185 186 187	ggct agtt gtga <210 <211 <213 <400	atget cecat ctatt attgt > SE L> LE 2> TY 3> OE > SE	etg a  cac o  ctc a  cycle  EQ II  ENGTH  (PE:  RGANI  EQUEN	agcadattggettet  NO: H: 54 PRT ISM:	getee tatte 2 11 Home 2	et gt gg ca	aaat itcaa	acta igttt	acq	gacat etcta	igaa aaat	aato	gcaaq Igtai	gtg (	tcaat	iggagt igctct	1872 1932 1992
173 175 177 179 184 185 186 187	ccta ggct agtt gtga <210 <211 <212	atget cecat ctatt attgt > SE L> LE 2> TY 3> OE > SE	etg a  cac o  ctc a  cycle  EQ II  ENGTH  (PE:  RGANI  EQUEN	agcadattggettet  NO: H: 54 PRT ISM:	getee tatte 2 11 Home 2	et gt gg ca	aaat itcaa	acta igttt	acq	gacat etcta	igaa aaat	aato	gcaaq Igtai	gtg (	tcaat	iggagt igctct	1872 1932 1992
173 175 177 179 184 185 186 187 189 190	ccta ggct agtt gtga <210 <211 <212 <400 Met	atget cecat ctatt attgt > SI > LI 2> TY 3> OF Ala	etg a  ga a  cac o  ctc a  EQ II  ENGTH  (PE:  RGANI  EQUEN  Trp	agcadattggetteta  D NO: FRT ISM: VCE: Leu	yetectatte 2 Homo 2 Gly 5	et gt gg ca o sag Ala	caaat atcaa oiens Ser	acta igtti	His	val	gaa aaat Trp	aatq taat	gcaaq tgta1 Trp	gtg 1	Met	iggagt igctct Leu	1872 1932 1992
173 175 177 179 184 185 186 187 189 190	ccta ggct agtt gtga <210 <211 <212 <400 Met	atget cecat ctatt attgt > SI > LI 2> TY 3> OF Ala	etg a  ga a  cac o  ctc a  EQ II  ENGTH  (PE:  RGANI  EQUEN  Trp	agcadattggetteta  D NO: FRT ISM: VCE: Leu	yetectatte 2 Homo 2 Gly 5	et gt gg ca o sag Ala	caaat atcaa oiens Ser	acta igtti	His	val	gaa aaat Trp	aatq taat	gcaaq tgta1 Trp	gtg 1	Met	iggagt igctct Leu	1872 1932 1992
173 175 177 179 184 185 186 187 190 191 193 194	ccta ggct agtt gtga <210 <211 <212 <400 Met	atget cecat ctatt attgt )> SI L> LI 2> TY 3> OI Ala Ser	ttg a tga a tga a tac c tc a EQ II ENGTH (PE: RGANI EQUEN Trp Cys	agcadattgg	getec catte 2 11 Homo 2 Gly 5 Leu	ct gt gg ca D sap Ala Ala	iens Ser	acta gttt Leu Ala	His Gln 25	val 10 Leu	tgaa aaat Trp Asp	aatg taat Gly Ser	gcaag cgtai Trp Asp	tgg tggtg tgggtg	Met 15	iggagt igctct Leu Ile	1872 1932 1992
173 175 177 179 184 185 186 187 190 191 193 194	ccta ggct agtt gtga <210 <211 <212 <400 Met 1 Gly	atget cecat ctatt attgt )> SI L> LI 2> TY 3> OI Ala Ser	ttg a tga a tga a tac c tc a EQ II ENGTH (PE: RGANI EQUEN Trp Cys	agcadattgg	getec catte 2 11 Homo 2 Gly 5 Leu	ct gt gg ca D sap Ala Ala	iens Ser	acta gttt Leu Ala	His Gln 25	val 10 Leu	tgaa aaat Trp Asp	aatg taat Gly Ser	gcaag cgtai Trp Asp	tgg tggtg tgggtg	Met 15	iggagt igctct Leu Ile	1872 1932 1992
173 175 177 179 184 185 186 187 199 191 193 194 196 197	ccta ggct agtt gtga <210 <211 <212 <400 Met 1 Gly	atget ccat ctatt attgt )> SI L> LI 2> TY 3> OF Ala Ser	etg a  iga a  iga a  cac o  itc a  EQ II  ENGTH  YPE:  RGANI EQUEN  Trp  Cys  Glu  35	agcad attgg ettch D NO: H: 54 PRT ISM: NCE: Leu 20 Glu	HOMO 2 Gly 5 Leu	et gt gg ca Sag Ala Ala Ile	caaat atcaa Ser Arg Val	Leu Leu 40	His Gln 25 Val	val 10 Leu	Trp Asp Lys	Gly Ser	Trp Asp Lys 45	Leu Gly 30 Val	Met 15 Thr	Leu Ile Cys	1872 1932 1992
173 175 177 179 184 185 186 187 189 190 191 193 194 196 197 199 200	ggct agtt gtga <210 <211 <212 <400 Met 1 Gly	atget tecat tattgt )> SH !> LH ?> TY 3> OH Ala Ser Ile Leu 50	etg a  iga a  ig	agcadattggettcha  D NO: H: 54 PRT ISM: Leu Leu 20 Glu Ile	HOMO 2 Gly 5 Leu Thr	o sag Ala Ala Ile Ala	oiens Ser Arg Val Gln 55	Leu Leu 40 Leu	His Gln 25 Val	val 10 Leu Glu	Trp Asp Lys	Gly Ser Ala Glu 60	Trp Asp Lys Gly	Leu Gly 30 Val	Met 15 Thr Gln Cys	Leu Ile Cys	1872 1932 1992
173 175 177 179 184 185 186 187 189 190 191 193 194 196 197 199 200 202	ccta ggct agtt gtga <210 <211 <212 <400 Met 1 Gly	atget tecat tattgt )> SH !> LH ?> TY 3> OH Ala Ser Ile Leu 50	etg a  iga a  ig	agcadattggettcha  D NO: H: 54 PRT ISM: Leu Leu 20 Glu Ile	HOMO 2 Gly 5 Leu Thr	o sag Ala Ala Ile Ala	oiens Ser Arg Val Gln 55	Leu Leu 40 Leu	His Gln 25 Val	val 10 Leu Glu	Trp Asp Lys	Gly Ser Ala Glu 60	Trp Asp Lys Gly	Leu Gly 30 Val	Met 15 Thr Gln Cys	Leu Ile Cys	1872 1932 1992
173 175 177 179 184 185 186 187 189 190 191 193 194 196 197 199 200 202 203	ccta ggct agtt gtga <210 <211 <212 <400 Met 1 Gly Thr Glu	atget tecat tattgt 1> LE 1> TY 3> OF Ala Ser Ile Leu 50 Glu	ttg a tga a tac c tac a	agcadattggettcha  D NO: H: 54 PRT [SM: Leu 20 Glu Ile Asp	Homo 2 Gly 5 Leu Gln Thr	o sag Ala Ala Ile Ala Leu 70	oiens Ser Arg Val Gln 55 Ile	Leu Ala Leu 40 Leu Cys	His Gln 25 Val Gln	Val 10 Leu Glu Pro	Trp Asp Lys Gly Arg 75	Gly Ser Ala Glu 60 Gly	Trp Asp Lys 45 Gly Thr	Leu Gly 30 Val Asn	Met 15 Thr Gln Cys	Leu Ile Cys Phe Lys 80	1872 1932 1992
173 175 177 179 184 185 186 187 189 190 191 193 194 196 197 199 200 202 203	ggct agtt gtga <210 <211 <212 <400 Met 1 Gly Thr	atget tecat tattgt 1> LE 1> TY 3> OF Ala Ser Ile Leu 50 Glu	ttg a tga a tac c tac a	agcadattggettcha  D NO: H: 54 PRT [SM: Leu 20 Glu Ile Asp	Homo 2 Gly 5 Leu Gln Thr	o sag Ala Ala Ile Ala Leu 70	oiens Ser Arg Val Gln 55 Ile	Leu Ala Leu 40 Leu Cys	His Gln 25 Val Gln	Val 10 Leu Glu Pro	Trp Asp Lys Gly Arg 75	Gly Ser Ala Glu 60 Gly	Trp Asp Lys 45 Gly Thr	Leu Gly 30 Val Asn	Met 15 Thr Gln Cys	Leu Ile Cys Phe Lys 80	1872 1932 1992

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/996,569

DATE: 12/06/200
TIME: 15:04:44

DATE: 12/06/2001

Input Set : A:\PF201D2-SeqList-text.txt Output Set: N:\CRF3\12062001\I996569.raw

200	C1	1701	7. T. a	Dha	7 ~~~	114 ~	0	7	D===	<b>3</b>	<b>01</b>	m 1	TT	7	Dh.a	Wa+
208	GTA	vaı	Ата	100	Arg	HIS	Cys	ASn	105	Asn	GIY	Thr	Trp	Asp	Pne	мет
	Uic	Sor	Lau		T.v.e	Thr	Trn	7 l s		Фил	Cor	'A GD	Cvc	110 Leu	7 20	Dho
211	птэ	Ser	115	ASII	пуѕ	TIIT	ттр	120	ASII	тут	ser	ASP	125	ьеu	AIG	PHE
	T.211	Gln		Δen	Tlo	Sar	Tla		Luc	Gln	Glu	Dho		Glu	λικα	Ι.Δ11
215	neu	130	FIO	тэр	116	261	135	СТУ	Буз	GIII	Giu	140	Cys	GIU	AIG	пец
	Tvr		Met	Tur	Thr	Va 1		Тvr	Ser	Tle	Ser		G1v	Ser	T.011	Δla
	145	, 41	1100	- 1 -	1111	150	O L y	- 1 -	OCI	110	155	THE	Ory	JCI	пси	160
		Ala	Tle	Leu	Tle		Glv	Tvr	Phe	Ara		Len	His	Cys	Thr	
221					165			+1~	1	170	*** 9	Deu		010	175	
	Asn	Tyr	Ile	His	Met	His	Leu	Phe	Val	Ser	Phe	Met	Leu	Arg		Thr
224		•		180					185					190		
226	Ser	Ile	Phe	Val	Lys	Asp	Arg	Val	Val	His	Ala	His	Ile	Gly	Val	Lys
227			195		-	_		200					205	-		-
229	Glu	Leu	Glu	Ser	Leu	Ile	Met	Gln	Asp	Asp	Pro	Gln	Asn	Ser	Ile	Glu
230		210					215					220				
232	Ala	Thr	Ser	Val	Asp	Lys	Ser	Gln	Tyr	Ile	Gly	Cys	Lys	Ile	Ala	Val
	225					230					235					240
	Val	Met	Phe	Ile	Tyr	Phe	Leu	Ala	Thr	Asn	$\mathtt{Tyr}$	$\mathtt{Tyr}$	${\tt Trp}$	Ile	Leu	Val
236					245					250					255	
	Glu	Gly	Leu		Leu	His	Asn	Leu		Phe	Val	Ala	Phe	Phe	Ser	Asp
239				260					265					270		
	Thr	Lys		Leu	Trp	Gly	Phe		Leu	Ile	Gly	Trp	_	Phe	Pro	Ala
242			275			_		280	_ •			•	285			_
	Ala		Val	Ala	Ala	Trp		Val	Ala	Arg	Ala		Leu	Ala	Asp	Ala
245	7	290	m	Q1	T	<b>a</b>	295	01	3	<b>-</b> 1-	<b>T</b>	300	<b>-1</b> .	m	<b>a1</b>	
	305	Cys	rrp	GIU	Leu		Ата	GTA	Asp	ire		Trp	тте	Tyr	GIN	
		Tlo	Lou	7 1 a	7 1 a	310	C1.,	T OU	λαν	Dho	315	т о	Dho	Leu	<b>1</b> a n	320
251	PIO	TTE	Leu	нта	325	TTE	сту	Leu	ASII	330	тте	теп	Pile	Leu	335	THE
	Va l	Δra	Va 1	T.011		Thr	T.v.e	Tlo	Trn		Фhr	λen	λla	Val		Uic
254	, uı	21119	vui	340	AIU	1111	БУЗ	116	345	Giu	1 111	RSII	пια	350	Сту	птэ
	Asp	Thr	Ara		Gln	Tvr	Ara	Lvs		Ala	Lvs	Ser	Thr	Leu	Val	Len
257	L		355	-1-		-1-	5	360			210	001	365		, 41	200
	Val	Leu	Val	Phe	Gly	Val	His		Ile	Val	Phe	Val		Leu	Pro	His
260		370			_		375	4				380	-1-			
262	Ser	Phe	Thr	Gly	Leu	Gly	Trp	Glu	Ile	Arg	Met	His	Cys	Glu	Leu	Phe
263				_		390	_			_	395		_			400
265	Phe	Asn	Ser	Phe	Gln	Gly	Phe	Phe	Val	Ser	Ile	Ile	Tyr	Cys	Tyr	Cys
266					405					410			_	_	415	_
268	Asn	Gly	Glu	Val	Gln	Ala	Glu	Val	Lys	Lys	Met	Trp	Ser	Arg	Trp	Asn
269				420					425					430		
	Leu	Ser	Val	Asp	Trp	Lys	Arg	Thr	Pro	${\tt Pro}$	Cys	Gly	Ser	Arg	Arg	Cys
272			435					440					445			
	Gly		Val	Leu	Thr	Thr		Thr	His	Ser	Thr		Ser	Gln	Ser	Gln
275		450	_	_	_	_	455					460				
		Ala	Ala	Ala	His		Trp	Cys	Leu	Ser		Ala	Lys	Leu	Pro	
278		_		_	_	470			_		475			_		480
280	Ser	Pro	Ala	Asp	Ser	Leu	Thr	Ala	Thr	Ser	Leu	Tyr	Leu	Ala	Met	Ser

RAW SEQUENCE LISTING DATE: 12/06/2001 PATENT APPLICATION: US/09/996,569 TIME: 15:04:44

Input Set : A:\PF201D2-SeqList-text.txt
Output Set: N:\CRF3\12062001\1996569.raw

281 485 495 283 Gly Val Thr Gln Ser Arg Thr Ala Ser His Thr Leu Ser Thr Arg Ser 500 505 286 Asn Lys Glu Asp Ser Gly Arg Gln Arg Asp Asp Ile Leu Met Glu Lys 515 520 289 Pro Ser Arg Pro Met Glu Ser Asn Pro Asp Thr Glu Gly 535 294 <210> SEQ ID NO: 3 295 <211> LENGTH: 23 296 <212> TYPE: DNA 297 <213> ORGANISM: Artificial Sequence 299 <220> FEATURE: 300 <221> NAME/KEY: Primer_Bind 301 <223> OTHER INFORMATION: This 5' primer sequence contains a SmaI restriction enzyme site followed by nucleotides corresponding to PTH receptor coding sequence. 303 306 <400> SEQUENCE: 3 307 cagccgtccc gggcttggcc tqq 23 310 <210> SEQ ID NO: 4 311 <211> LENGTH: 27 312 <212> TYPE: DNA 313 <213> ORGANISM: Artificial Sequence 315 <220> FEATURE: 316 <221> NAME/KEY: Primer_Bind 317 <223> OTHER INFORMATION: This 3' primer sequence contains a SalI restriction enzyme site and a sequence complementary to the human PTH 318 319 receptor. 321 <400> SEQUENCE: 4 322 cctcagtgtc gacttgtcat ccttcag 27 325 <210> SEQ ID NO: 5 326 <211> LENGTH: 27 327 <212> TYPE: DNA 328 <213> ORGANISM: Artificial Sequence 330 <220> FEATURE: 331 <221> NAME/KEY: Primer_Bind 332 <223> OTHER INFORMATION: This 5' primer contains a HindIII restriction enzyme site 333 and a nucleotide sequence corresponding to the 5' UTR of the cDNA 334 encoding human PTH receptor. 336 <400> SEQUENCE: 5 337 gttggcatat tggaagcttt ttgcggg 27 340 <210> SEQ ID NO: 6 341 <211> LENGTH: 28 342 <212> TYPE: DNA 343 <213> ORGANISM: Artificial Sequence 345 <220> FEATURE: 346 <221> NAME/KEY: Primer_Bind 347 <223> OTHER INFORMATION: This 3' primer sequence contains an XbaI restriction enzyme site, a translation stop codon, and nucleotides 349 complementary to the human PTH receptor coding sequence.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/996,569

DATE: 12/06/2001

TIME: 15:04:45

Input Set : A:\PF201D2-SeqList-text.txt
Output Set: N:\CRF3\12062001\I996569.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application Number

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date